





Royal Holloway 2015 Science Festival - Saturday March 7th

Our second Oval running season kicks off on the first weekend of March with a return visit to the Royal Holloway Science Festival.

The logistics last year were extremely challenging; but the College has been busy and we have a new venue with good vehicular access: the Victorian boiler house.



When the College was built in the early 1880's, huge boilers were installed to heat the main Founder's building. They needed to be remote from the academic activities so as to keep the noise (and perhaps the burly stokers) away from the all-female student population; so the boilers were 250m down the hill and steam pipes ran up to Founder's through a tunnel.

Nowadays, of course, boilers are much more efficient, and gas fired. They have been moved to the rear of

the complex, and the freed space lightly renovated and converted for teaching.





This is the hall that we are using: the seats pull back to create a clear space that is a bit larger than the old swimming pool we used in 2014.



Here are the arrangements. I have hired the usual van and we shall convene at Guildford MES around 14.30 on the Friday for loading. We get access to the boiler house at 16.00 but it may take 30 minutes for the support staff to get the seats wound back; there is a cafe in an adjacent building if we have to wait.

The building will be locked overnight, but I would not recommend leaving valuable items there.

I shall be on site from 08.00 on the Saturday. The public are invited in from 10.00, though often they are already circulating by 9.30.

Knockdown is at 16.00 and we will take everything back to Guildford that evening.

We're in the festival brochure this year, and there will be a pop-up cafe in the courtyard, so we expect many more visitors.



How steam railways work

Live steam engines presented by Gauge 1 Model Railway Association, Surrey

As well as the track, I plan to have a small display of machine tools along with the prototype of the new Difference Engine we are constructing as part of our Babbage project.

Supporting the Great Gathering

This is, I believe, Mike Bland's Mallard as part of the Yorkshire Group's display at the NRM. What a great shot.



2015 AGM

Our 2015 AGM will be during the tea break at Mike Bland's GTG on Tuesday 10 March. There will be a short report on the group's activities and the accounts will be presented.

Our current officers - Alan England (chair), Adrian Johnstone (deputy chair), Mike Bland (treasurer) and Peter Jackman (technical officer) - are all prepared to stand for a second term.

Please let me know if you have any extra items for the agenda.

Track work

Work on the oval continues apace. Peter has invested in a new high quality 3D printer with a large print bed which produces excellent results.





Above: the print head modified with a dual ducted fan that cools both the object being printed and the top of the extrusion tube (which can block if the melt zone rises too far up the tube). In nine minutes, the printer can produce a point rod guide like the one shown on the right.

Peter has designed and made a three-way turnout which connects the outer steam bay and cooling sidings to the outer oval. The point partially straddles two boards, and needs to be removable for transport.

For robustness, the point lever, lever housing and sleepers have been printed as a single monolithic unitseen here from below:









The switch mechanism operates both blades via a single push-pull rod, connected to a modified door bolt. The turnout is fixed to the boards with turn buckles, and the usual Jackman track joiners.



Adrian on his feet

Guildford MES asked if we could find a speaker to help along the process of introducing the club to Gauge 1.

I thought that perhaps I should do it since lecturing is part of my day job... I had a lot of advice and help, especially from Michael Wrottesley who helped me put together an exhibition table. We had my dock tank slowly circulating a minimum radius circle of Marklin track pushing Tony Hall-Patch's anniversary truck; Peter Howland's Bond's tank and coal fired Atlantic (brought by Elizabeth); and the Duchess (collected by Michael from Peter's that evening). Michael also brought his magnificent Caprotti valve Claughton, his 1909 clockwork tank engine and other treasures.



The talk went well, judging by the reception, and I now have over 100 slides all to the same format as our posters. I gave a compressed version to Sutton

MEX the following week. Feel free to pass my name on to the meeting organisers for clubs you are involved with if they are looking for G1 speakers.

Didcot

David Lemar, known to many of us, invited me down to Didcot to discuss digitisation of their newsletter on the model that we developed for G1MRA. David sold me my first G1 engine (the Aster GER tank) at a knock down price, and thus got me properly involved, so I certainly owe him favour, but in any case David offered to take me round the sheds afterwards, so obviously I agreed instantly.

A film crew had been in the previous week, so unusually the main engine shed has two clear roads, allowing a long shot. That's the back of the new steam rail motor you can see.



I also got some nice close up shots: here's a bit of King, and the valve gear of the rail motor. I'd love to see that modelled in G1.





Frontpiece

Bulleid Light Pacific 34051 *Winston Churchill* at Ropley in 2013 at the start of cosmetic restoration for this year's anniversary of the Churchill funeral train. The nearside cylinder and valve gear were looking pretty sad too.





SURREY G1MRA GROUP

2015 fixture list



Surrey group meets second Tuesday afternoons Please refer to your membership list for venues

Tue 13 Jan Sutton MEC 13.00

Fri 16 Jan - Sun 18 Jan London Model Engineer Show - Invicta Track - Alexandra Palace

Tue 10 Feb Ken Lowes 13.00

Sat 21 Feb Bacon Butty Bash, Durrington; Salisbury and Stonehenge Group

Sat 7 Mar Royal Holloway Science Festival All day; setup Friday evening

Tue 10 Mar Mike Bland 13.00

Sat 28 Mar - Sun 29 Mar Festival of Model Railways - Anglia Roads - Alexandra Palace

Tue 14 Apr Martin Hulse 13.00

Sat 25 Apr G1MRA spring meeting, Shepshed near Loughborough

Sat 9 May ALSRM show, Reading All day; setup Friday evening or Saturday

Tue 12 May Michael Wrottesley 13.00 Tue 9 Jun Ken Lowes 13.00

Sat 4 Jul - Sun 5 Jul GMES rally Guildford - running on new permanent track

Tue 14 Jul Mike Bland 13.00

Sat 8 Aug Lionsmeet 2015 at GMES rally - running on new permanent track

Tue 11 AugBob Boorman13.00Tue 8 SepPeter Jackman13.00Tue 13 OctGuildford MES13.00

Oct G1MRA AGM Woking?

Tue 10 Nov Sutton MEC 13.00

Tue 8 Dec Bob Boorman 13.00

Dec Model Engineer Exhibition Esher?

Alan England 01932 400282 <u>alan.england@ntlworld.com</u>
Adrian Johnstone 01784 443425 <u>a.johnstone@rhul.ac.uk</u>